



# COMPETENCY STANDARD

## Computer Operation

Level: 03

(ICT Sector)

Competency Standard Code: CS-ICT-CO-L3-EN-V1



**National Skills Development Authority**  
**Prime Minister's Office**  
**Government of the People's Republic of Bangladesh**



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This Competency Standard for Computer Operation is a document for the development of curricula, teaching and learning materials, and assessment tools. It also serves as the document for providing training consistent with the requirements of industry in order to meet the qualification of individuals who graduated through the established standard via competency-based assessment for a relevant job.

This document has been developed by NSDA in association with ICT Sector ISC, industry representatives, academia, related specialist, trainer and related employee.

Public and private institutions may use the information contained in this standard for activities benefitting Bangladesh.

## **Introduction**

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The NSDA aims to enhance an individual's employability by certifying completeness with skills. NSDA works to expand the skilling capacity of identified public and private training providers qualitatively and quantitatively. It also aims to establish and operationalize a responsive skills ecosystem and delivery mechanism through a combination of well-defined set of mechanisms and necessary technical supports.

Key priority economic growth sectors identified by the government have been targeted by NSDA to improve current job skills along with existing workforce to ensure required skills to industry standards. Training providers are encouraged and supported to work with industry to address identified skills and knowledge to enable industry growth and increased employment through the provision of market responsive inclusive skills training program. "Computer Operation" is selected as one of the priority occupations of ICT Sector. This standard is developed to adopt a demand driven approach to training with effective inputs from Industry Skills Councils (ISC's), employer associations and employers.

Generally, a competency standard informs curriculum, learning materials, assessment and certification of trainees enrolled in Skills Training. Trainees who successfully pass the assessment will receive a qualification in the National Skills Qualification Framework (NSQF) under Bangladesh National Qualification Framework (BNQF) and will be listed on the NSDA's online portal.

This competency standard is developed to improve skills and knowledge in accordance with the job roles, duties and tasks of the occupation and ensure that the required skills and knowledge are aligned to industry requirements. A series of stakeholder consultations, workshops were held to develop this document.

The document also details the format, sequencing, wording and layout of the Competency Standard for an occupation which is comprised of Units of Competence and its corresponding Elements.

## Overview

A competency standard is a written specification of the knowledge, skills and attitudes required for the performance of an occupation, trade or job corresponding to the industry standard of performance required in the workplace.

The purpose of a competency standards is to:

- provide a consistent and reliable set of components for training, recognising and assessing people's skills, and may also have optional support materials
- enable industry recognised qualifications to be awarded through direct assessment of workplace competencies
- encourage the development and delivery of flexible training which suits individual and industry requirements
- encourage learning and assessment in a work-related environment which leads to verifiable workplace outcomes

Competency standards are developed by a working group comprised of representative from NSDA, Key Institutions, ISC, and industry experts to identify the competencies required of an occupation in Informal Sector.

Competency standards describe the skills, knowledge and attitude needed to perform effectively in the workplace. CS acknowledge that people can achieve technical and vocational competency in many ways by emphasizing what the learner can do, not how or where they learned to do it.

With competency standards, training and assessment may be conducted at the workplace or at training institute or any combination of these.

Competency standards consist of a number of units of competency. A unit of competency describes a distinct work activity that would normally be undertaken by one person in accordance with industry standards.

Units of competency are documented in a standard format that comprises of:

- unit title
- nominal duration
- unit code
- unit descriptor
- elements and performance criteria
- variables and range statement
- curricular content guide
- assessment evidence guides

Together, all the parts of a unit of competency:

- describe a work activity
- guide the assessor to determine whether the candidate is competent or not yet competent

The ensuing sections of this document comprise of a description of the relevant occupation, trade or job with all the key components of a unit of competency, including:

- a chart with an overview of all Units of Competency for the relevant occupation, trade or job including the Unit Codes and the Unit of Competency titles and corresponding Elements
- the Competency Standard that includes the Unit of Competency, Unit Descriptor, Elements and Performance Criteria, Range of Variables, Curricular Content Guide and Assessment Evidence Guide.

## Competency Standards for National Skills Certificate – Level-3 in Computer Operation in ICT Sector

### Level Descriptors of NSQF (BNQF 1-6)

Level & Job Classification	Knowledge Domain	Skills Domain	Responsibility Domain
6-Mid-Level Manager/ Sub Assistant Engineer	Comprehensive actual and theoretical knowledge within a specific work or study area with an awareness of the validity and limits of that knowledge, able to analyse, compare, relate and evaluate.	Specialised and wider range of cognitive and practical skills required to provide leadership in the development of creative solutions to defined problems. Communicate professional issues and solutions to the team and to external partners/users.	Work under broad guidance and self-motivation to execute strategic and operational plan/s. Lead lower-level management. Diagnose and resolve problems within and among work groups.
5-Supervisor	Broad knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to scrutinize and break information into parts by identifying motives or causes.	Broad range of cognitive and practical skills required to generate solutions to specific problems in one or more work or study areas. Communicate practice-related problems and possible solutions to external partners.	Work under guidance of management and self-direction to resolve specific issues. Lead and take responsibility for the work and actions of group/team members. Bridge between management.
4-Highly Skilled Worker	Broader knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to solve problems to new situations by comparing and applying acquired knowledge.	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying the full range of methods, tools, materials and information. Communicate using technical terminology and IT technology with partners and users as per workplace requirements.	Work under minimal supervision in specific contexts in response to workplace requirements. Resolve technical issues in response to workplace requirements and lead/guide a team/ group.
3-Skilled Worker	Moderately broad knowledge in a specific work or study area, able to perceive ideas and abstract from drawing and design according to workplace requirements.	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools. Communicate with his team and limited external partners upholding the values, nature and culture of the workplace	Work or study under supervision with considerable autonomy. Participate in teams and responsible for group coordination.
2-Semi Skilled Worker	Basic understanding of underpinning knowledge in a specific work or study area, able to interpret and apply common occupational terms and instructions.	Skills required to carry out simple tasks, communicate with his team in the workplace presenting and discussing results of his work with required clarity.	Work or study under supervision in a structured context with limited scope of manipulation
1 –Basic Skilled Worker	Elementary understanding of ability to interpret the underpinning knowledge in a specific study area, able to interpret common occupational terms and instructions.	Specific Basic skills required to carry out simple tasks. Interpret occupational terms and present the results of own work within guided work environment/ under supervision.	Work under direct supervision in a structured context with limited range of responsibilities.

## List of Abbreviations

<b>General</b>	
NSDA	National Skills Development Authority
BMET	Bureau of Manpower Employment and Training
ILO	International Labor Organization
ISC	Industry Skills Council
NPVC	National Pre-Vocation Certificate
NSQF	National Skills Qualifications Framework
PPP	Public Private Partnership
SCVC	Standards and Curriculum Validation Committee
SEIP	Skills for Employment Investment Program
STP	Skills Training Provider
UoC	Unit of Competency
<b>Occupation Specific</b>	
GUI	Graphical User Interface
ESD	Electro-static Discharge
ICT	Information Communication Technology (ICT)
KPI	Key Performance Indicator
LCD	Liquid Crystal Display
OSH	Occupational safety and health
PPE	Personal protective equipment
RAM	Random Access Memory
USB	Universal serial bus





## **Approval of Competency Standard**

Approved by  
9<sup>th</sup> Executive Committee (EC) Meeting of NSDA  
Held on 16 June 2022

Deputy Director (Admin)  
and  
Officer of Secretarial Duties for EC Meeting  
National Skills Development Authority



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**Competency Standards for National Skill Certificate – 3 in  
Computer Operation in ICT Sector**

**Course Structure**

<b>SL</b>	<b>Unit Code and Title</b>		<b>UoC Level</b>	<b>Nominal Duration (Hours)</b>
<b>Generic Units of Competencies</b>				<b>20</b>
1.	GU-14-L3-V1	Carryout Communication with Clients	3	20
<b>Sector Specific Units of Competencies</b>				<b>15</b>
2.	SU-ICT-03-L3-V1	Comply to Ethical Standards in the ICT Workplace	3	15
<b>Occupation Specific Units of Competencies</b>				<b>325</b>
3.	OU-ICT-CO-01-L3-V1	Operate a Personal Computer	3	20
4.	OU-ICT-CO-02-L3-V1	Prepare a Document Using Word Processor	3	100
5.	OU-ICT-CO-03-L3-V1	Prepare a Spreadsheet	3	90
6.	OU-ICT-CO-04-L3-V1	Prepare a Presentation	3	60
7.	OU-ICT-CO-05-L3-V1	Use Internet and Access Resources	3	30
8.	OU-ICT-CO-06-L3-V1	Perform Basic Maintenance and Troubleshooting	3	25
<b>Total Nominal Learning Hours</b>				<b>360</b>

## Units & Elements at Glance

### Generic Units of Competencies

<b>Code</b>	<b>Unit of Competency</b>	<b>Elements of Competency</b>	<b>Duration (Hours)</b>
GU-14-L3-V1	Carryout Communication with Clients	<ol style="list-style-type: none"><li>1. Interpret client-based communication and etiquette</li><li>2. Prepare documents for endeavor/working environment/platform</li><li>3. Conduct communication</li></ol>	20

### Sector Specific Units of Competencies

<b>Code</b>	<b>Unit of Competency</b>	<b>Elements of Competency</b>	<b>Duration (Hours)</b>
SU-ICT-03-L3-V1	Comply to Ethical Standards in the ICT Workplace	<ol style="list-style-type: none"><li>1. Uphold the requirements of clients</li><li>2. Deliver quality products and services</li><li>3. Maintain professionalism at workplace</li><li>4. Maintain workplace code of conduct.</li></ol>	15

## Occupation Specific Units of Competencies

Code	Unit of Competency	Elements of Competency	Duration (Hours)
OU-ICT-CO-01-L3-V1	Operate a Personal Computer	<ol style="list-style-type: none"> <li>1. Start computer and access system information and features</li> <li>2. Navigate and manipulate desktop environment</li> <li>3. Manage user accounts</li> <li>4. Organize files and folders</li> <li>5. Follow good practice</li> </ol>	20
OU-ICT-CO-02-L3-V1	Prepare a Document Using Word Processor	<ol style="list-style-type: none"> <li>1. Prepare for the Job</li> <li>2. Create Document</li> <li>3. Format Document</li> <li>4. Review and Protect Document</li> <li>5. Print &amp; Transfer Document</li> </ol>	100
OU-ICT-CO-03-L3-V1	Prepare a Spreadsheet	<ol style="list-style-type: none"> <li>1. Prepare for the Job</li> <li>2. Create Spreadsheet</li> <li>3. Apply formulas and functions</li> <li>4. Perform data manipulation and presentation</li> <li>5. Review and Protect Workbook</li> <li>6. Print &amp; Transfer Document</li> </ol>	90
OU-ICT-CO-04-L3-V1	Prepare a Presentation	<ol style="list-style-type: none"> <li>1. Prepare for the Job</li> <li>2. Create Presentation</li> <li>3. Furnish presentation</li> <li>4. Apply slide master</li> <li>5. Print &amp; Transfer presentation</li> </ol>	60
OU-ICT-CO-05-L3-V1	Use Internet and Access Resources	<ol style="list-style-type: none"> <li>1. Prepare resources for sharing</li> <li>2. Access Resource using internet</li> <li>3. Use and manage e-mail</li> <li>4. Use Virtual Platform</li> </ol>	30
OU-ICT-CO-06-L3-V1	Perform Basic Maintenance and Troubleshooting	<ol style="list-style-type: none"> <li>1. Identify the problem</li> <li>2. Diagnose and fix Peripheral device faults</li> <li>3. Fix printing error</li> <li>4. Fix application error</li> <li>5. Troubleshoot network connectivity</li> </ol>	25

# **Generic Units of Competencies**



<b>Unit Code and Title</b>	<b>GU-14-L3-V1: Carryout Communication with Clients</b>
<b>Unit Descriptor</b>	This unit covers the knowledge, skills and attitudes required carryout communication with clients. It specifically includes the task of interpreting client-based communication and etiquette, preparing documents for endeavor/working environment/platform and conducting communication
<b>Nominal Hours</b>	<b>20 Hours</b>
<b>Elements of Competency</b>	<b>Performance Criteria</b> <b><u>Bold &amp; Underlined</u></b> terms are elaborated in the Range of Variables Training Components
1. Interpret client-based communication and etiquette	1.1 Code of conduct of communication are interpreted as per working environment/platform 1.2 Manners and etiquette of communication is interpreted as 1.3 Questions about routine working environment/platform <b><u>procedures and matters</u></b> are explained as required
2. Prepare documents for endeavor/working environment/platform	2.1 Relevant <b><u>documents</u></b> are prepared for effective communication with work environment 2.2 <b><u>Validated sources</u></b> are identified as per client's requirements 2.3 Documents are validated by the authentic sources as per client's requirements 2.4 Documents are submitted as per standard procedure
3. Conduct communication	3.1 Appropriate means/ method/ <b><u>way of communication</u></b> are maintained as per working environment/ platform 3.2 <b><u>Channels of communication</u></b> are identified and followed 3.3 Communication is conducted in a <b><u>courteous manner</u></b> to gather and convey information 3.4 Appropriate non-verbal communication is used as required
<b>Range of Variables</b>	
<b>Variable</b>	<b>Range</b> (may include but not limited to):
1. Procedures and Matters	1.1 Notes 1.2 Agenda 1.3 Simple reports such as progress and incident reports 1.4 Job sheets 1.5 Operational manuals 1.6 Brochures and promotional material 1.7 Visual and graphic materials 1.8 Standards 1.9 OSH information

	1.10 Signs
2. Documents	2.1 Personnel identification document 2.2 Portfolio 2.3 Financial document 2.4 Task proposal
3. Validated sources	3.1 Chamber of commerce 3.2 Related association 3.3 High commission 3.4 Related Bank 3.5 Local authority 3.6 Related legal entities
4. Way of Communication	4.1 Verbal 4.2 Written 4.3 Online communication
5. Channels of communication	5.1 Marketplace messenger 5.2 Zoom 5.3 Google meet 5.4 Microsoft team 5.5 Go meeting 5.6 Boithok 5.7 Webex 5.8 Skype 5.9 Whatsapp
6. Courteous Manner	6.1 Effective questioning 6.2 Active listening 6.3 Speaking skills
<b>Evidence Guide</b>	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency	
1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 interpreted client-based communication and etiquette 1.2 prepared documents for endeavour/working/environment/platform 1.3 conducted communication
2. Underpinning Knowledge	2.1. Working platform 2.2. Terms and condition in platform 2.3. Documents for communication 2.4. Validated sources 2.5. Way of communication 2.6. Channel of communication 2.7. Courteous manner

3. Underpinning Skills	3.1 Handling personal computer/laptop 3.2 Interpreting communication needs 3.3 Using channels of communication 3.4 Logging with online platform 3.5 Interpreting terms and condition
4. Underpinning Attitudes	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace
5. Resource Implications	The following resources must be provided: 5.1 Relevant tools, Equipment, software and facilities needed to perform the activities. 5.2 Required learning materials.
6. Methods of Assessment	Methods of assessment may include but not limited to: 6.1 Written Test 6.2 Demonstration 6.3 Oral Questioning
7. Context of Assessment	7.1 Competency assessment must be done in a NSDA accredited assessment centre 7.2 Assessment should be done by an NSDA certified/nominated assessor
<p><b>Accreditation Requirements</b></p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under National Skills Qualification (NSQF). Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	

# **Sector Specific Units of Competencies**

<b>Unit Code and Title</b>	<b>SU-ICT-04-L3-V1: Comply to Ethical Standards in the ICT Workplace</b>
<b>Unit Descriptor</b>	This unit covers the knowledge, skills and attitudes required to comply to ethical standards in the ICT workplace. It specifically includes the task of upholding the requirements of clients, delivering quality products and services, maintaining professionalism at workplace, and maintaining workplace code of conduct.
<b>Nominal Hours</b>	<b>15 Hours</b>
<b>Elements of Competency</b>	<b>Performance Criteria</b> <b><u>Bold and Underlined</u></b> terms are elaborated in the Range of Variables
1. Uphold the requirements of clients	1.1 Clients' requirements are identified. 1.2 Confidentiality of information is maintained in accordance with workplace policies / organizational policies/ national legislation. 1.3 Potential conflicts of interest are identified and involved parties of potential conflicts are notified. 1.4 Proprietary rights of client/customer is asserted.
2. Deliver quality products and services	2.1. Products and services are provided according to the clients' requirements. 2.2. Work is completed as per standards. 2.3. Quality processes are implemented when developing products and services.
3. Maintain professionalism at workplace	3.1 Work processes are delivered as per standards. 3.2 Skills, knowledge and qualifications are presented in a professional manner. 3.3 Services and products developed by self and others are delivered as per workplace standard. 3.4 Unbiased and objective information are provided to clients. 3.5 Realistic estimates for time, cost and delivery of outputs are presented during negotiation.
4. Maintain workplace code of conduct.	4.1 Workplace code of conduct are interpreted 4.2 Workplace code of conduct is followed.
<b>Range of variables</b>	
<b>Variables</b>	<b>Range</b> (may include but not limited to):
<b>Evidence Guide</b> The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency	

1. Critical aspects of competency	<p>Assessment required evidence that the candidate:</p> <ol style="list-style-type: none"> <li>1.1 asserted proprietary rights of client/customer.</li> <li>1.2 completed work to industry and international standards.</li> <li>1.3 implemented quality processes when developing products and services.</li> <li>1.4 delivered services and products developed by self and others.</li> <li>1.5 provided unbiased and objective information to clients.</li> <li>1.6 followed workplace code of conduct.</li> </ol>
2. Underpinning knowledge	<ol style="list-style-type: none"> <li>2.1. Corporate code of confidentiality of information</li> <li>2.2. organizational policies, national legislation and workplace policies in relation to IT sector</li> <li>2.3. Law and regulations pertaining to proprietary rights</li> <li>2.4. Quality processes for products and services</li> <li>2.5. Procedure of provided to client information</li> <li>2.6. Method of estimating for time, cost and delivery products and services</li> <li>2.7. Workplace code of conduct in IT sector</li> </ol>
3. Underpinning Skills	<ol style="list-style-type: none"> <li>3.1. Upholding confidentiality of information in accordance with organizational policies, national legislation and workplace policies</li> <li>3.2. Asserting proprietary rights of client/customer</li> <li>3.3. Completing work in accordance with industry and international standards</li> <li>3.4. Implementing quality processes when developing products and services</li> <li>3.5. Delivering correctly services and products developed by self and others</li> <li>3.6. Providing unbiased and objective information are to clients.</li> <li>3.7. Presenting realistic estimates for time, cost and delivery of outputs during negotiation</li> <li>3.8. Following workplace code of conduct</li> </ol>
4. Underpinning Attitudes	<ol style="list-style-type: none"> <li>4.1 Commitment to occupational health and safety</li> <li>4.2 Promptness in carrying out activities</li> <li>4.3 Sincere and honest to duties</li> <li>4.4 Environmental concerns</li> <li>4.5 Eagerness to learn</li> <li>4.6 Tidiness and timeliness</li> <li>4.7 Respect for rights of peers and seniors in workplace</li> <li>4.8 Communication with peers and seniors in workplace.</li> </ol>
5. Resource Implications	<p>The following resources must be provided:</p> <ol style="list-style-type: none"> <li>5.1 Relevant tools, Equipment, software and facilities needed to perform the activities.</li> <li>5.2 Required learning materials.</li> </ol>

6. Methods of Assessment	6.1 Written Test 6.2 Demonstration 6.3 Oral Questioning
7. Context of Assessment	7.1. Competency assessment must be done in NSDA accredited center. 7.2. Assessment should be done by NSDA certified/nominated assessor
<p><b>Accreditation Requirements</b></p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under NSQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	

# **Occupation Specific Units of Competencies**



<b>Unit Code and Title</b>	<b>OU-ICT-CO-01-L3-V1: Operate a Personal Computer</b>
<b>Unit Descriptor</b>	This unit covers the knowledge, skills and attitude required to operate a personal computer. It specifically includes the requirements of starting computer and access system information and features, navigating and manipulating desktop environment, managing user accounts, organizing files and folders and following good practice
<b>Nominal Hours</b>	<b>20 hours</b>
<b>Elements of Competency</b>	<b>Performance Criteria</b> <b><u>Bold and underlined</u></b> terms are elaborated in the range of variables
1. Start computer and access system information and features	<p>1.1 Workspace, furniture and equipment are adjusted to suit user <b><u>ergonomic requirements</u></b>.</p> <p>1.2 <b><u>Work arrangements</u></b> are ensured to meet organizational and <b><u>Occupational Safety and Health (OSH) requirements</u></b> for computer operation.</p> <p>1.3 Personal Computer and all the Peripherals are checked and ensured operational as per job requirement.</p> <p>1.4 Computer is started or logged on according to user procedures.</p> <p>1.5 Basic functions and features are identified using system information.</p> <p>1.6 <b><u>Common applications</u></b> of OS are accessed.</p> <p>1.7 Help functions are used as required.</p>
2. Navigate and manipulate desktop environment	<p>2.1 Correct desktop icons are selected, opened, closed and accessed features.</p> <p>2.2 Multiple windows are opened, resized and closed</p> <p>2.3 Desktop personalization is performed.</p> <p>2.4 Start menu and taskbar are customized</p>
3. Manage user accounts	<p>3.1 Existing <b><u>user account</u></b> is manipulated.</p> <p>3.2 New user account is created and managed.</p>
4. Organize files and folders	<p>4.1 Folders are created with appropriate name</p> <p>4.2 Files are organized in appropriate folders</p> <p>4.3 Rename and move folders and files as required</p> <p>4.4 Identify folder and <b><u>file attributes</u></b></p> <p>4.5 Move folders and files using cut and paste, and drag and drop techniques</p> <p>4.6 Save folders and files to <b><u>appropriate media</u></b> where necessary</p> <p>4.7 Folders and files are searched</p> <p>4.8 Deleted folder and files are restored as necessary</p>
5. Follow good practice	<p>5.1 Naming convention is followed for files and folders.</p> <p>5.2 Documents are saved in regular intervals</p> <p>5.3 Backup is performed for documents in a regular interval.</p>

	<p>5.4 All open applications are closed before shutdown or leaving workstation.</p> <p>5.5 Shut down the Personal Computer and associated peripherals according to Standard Operating Procedure (SOP).</p>
<b>Range of Variables</b>	
<b>Variable</b>	<b>Range (May include but not limited to: )</b>
1. Ergonomic requirements	<p>1.1 Avoiding radiation from computer screens</p> <p>1.2 Screen position</p> <p>1.3 Chair height, seat and back adjustment</p> <p>1.4 Workstation height and layout</p> <p>1.5 Document holder</p> <p>1.6 Keyboard and mouse position</p> <p>1.7 Lighting</p> <p>1.8 Noise minimization</p> <p>1.9 Posture</p> <p>1.10 Footrest</p>
2. Work arrangements	<p>2.1. Exercise breaks</p> <p>2.2. Mix of repetitive and other activities</p> <p>2.3. Rest periods</p> <p>2.4. Visual display unit (VDU) eye testing</p>
3. Occupational safety and health requirements	<p>3.1. OSH guidelines related to the:</p> <p>3.1.1. Use of the screen equipment,</p> <p>3.1.2. Computing equipment and peripherals</p> <p>3.1.3. Ergonomic work stations,</p> <p>3.1.4. Security procedures,</p> <p>3.1.5. Customization requirements</p> <p>3.2. Statutory requirements</p>
4. Common applications	<p>4.1 Word pad</p> <p>4.2 Note pad</p> <p>4.3 Paint</p> <p>4.4 Media player</p> <p>4.5 Calculator</p> <p>4.6 Sticky Notes</p> <p>4.7 Snipping Tool</p>
5. User account	<p>5.1 Local user account</p> <p>5.2 Microsoft account</p>
6. File attributes	<p>6.1 Dates</p> <p>6.2 Size</p>
7. Appropriate media	<p>7.1 CDs/DVD</p> <p>7.2 External hard drive</p> <p>7.3 Locations on a network/ on Cloud</p> <p>7.4 USB/ Flash/Thumb drives</p> <p>7.5 Zip disks</p>
<b>Evidence Guide</b>	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the unit of competency.	
1. Critical aspects of competency	Assessment required evidence that the candidate:

	<ul style="list-style-type: none"> <li>1.1 started computer and accessed system information and features</li> <li>1.2 navigated and manipulated desktop environment</li> <li>1.3 organized files and folders</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Occupational Health &amp; Safety.</li> <li>2.2 Hazard in IT workplace.</li> <li>2.3 Use of appropriate PPEs.</li> <li>2.4 Naming convention for files/folders</li> <li>2.5 Desktop items</li> <li>2.6 Different type of software and application packages</li> <li>2.7 Access privilege of user account</li> <li>2.8 Procedure to Keep a clean workplace and equipment orderly.</li> </ul>
3. Underpinning skill	<ul style="list-style-type: none"> <li>3.1 Starting computer</li> <li>3.2 Running application software</li> <li>3.3 Managing desktop item</li> <li>3.4 Manipulating files and folders</li> </ul>
4. Required attitude	<ul style="list-style-type: none"> <li>4.1 Commitment to occupational safety and health.</li> <li>4.2 Promptness in carrying out activities.</li> <li>4.3 Sincere and honest to duties.</li> <li>4.4 Eagerness to learn the document preparation process.</li> <li>4.5 Tidiness and timeliness.</li> <li>4.6 Environmental concerns.</li> <li>4.7 Respect for the rights of peers, subordinates and seniors at the workplace.</li> <li>4.8 Communication with peers, subordinates and seniors in the workplace.</li> <li>4.9 Keeps a clean and orderly workplace and equipment.</li> </ul>
5. Resource implication	<ul style="list-style-type: none"> <li>5.1 Relevant tools, Equipment, software and facilities needed to perform the activities.</li> <li>5.2 Required learning materials.</li> </ul>
6. Methods of assessment	<ul style="list-style-type: none"> <li>6.1 Written test</li> <li>6.2 Demonstration</li> <li>6.3 Oral questioning</li> </ul>
7. Context of assessment	<ul style="list-style-type: none"> <li>7.1 Competency assessment must be done in NSDA accredited center.</li> <li>7.2 Assessment should be done by NSDA certified/nominated assessor</li> </ul>

**Accreditation Requirements**

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under NSQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

<b>Unit Code Title</b>	<b>OU-ICT-CO-02-L3-V1: Prepare a Document Using Word Processor</b>
<b>Unit Descriptor</b>	This unit covers the knowledge, skills and attitudes required to prepare a document using word processing software. This specifically includes preparing for the job, creating document, formatting document, reviewing and protecting document, and printing and transferring document.
<b>Nominal Hours</b>	<b>100 Hours</b>
<b>Elements of Competency</b>	<b>Performance Criteria</b> <b><u>Bold &amp; Underlined</u></b> terms are elaborated in the Range of Variables)
1. Prepare for the Job	<p>1.1 Safe work practices according to workplace procedures are observed and followed.</p> <p>1.2 <b><u>Necessary Software</u></b> is checked and ensured operational as per job requirement.</p> <p>1.3 Availability of required fonts for typing of Bangla and English are Ensured.</p> <p>1.4 <b><u>Type of Documents</u></b> are identified to be prepared.</p>
2. Create Document	<p>2.1. New document is created from blank/ library as per requirement.</p> <p>2.2. Word options and ribbon display options are set as required.</p> <p>2.3. Error-free typing in Bangla and English is performed as per typing technique and keyboard layout.</p> <p>2.4. <b><u>Page layout</u></b> are set as per job requirements.</p> <p>2.5. <b><u>Contents</u></b> are inserted as per specification.</p> <p>2.6. <b><u>Breaks Options</u></b> are applied as per requirement.</p> <p>2.7. Spell check (for English) is performed.</p>
3. Format Document	<p>3.1 <b><u>Formatting</u></b> is used as per instructions.</p> <p>3.2 <b><u>References</u></b> are applied to make document with professional look.</p> <p>3.3 Document is saved in a specific directory/ destination with appropriate <b><u>file format</u></b>.</p>
4. Review and Protect Document	<p>4.1 Document is reviewed against job specification in track change mode.</p> <p>4.2 Comments are inserted as required</p> <p>4.3 Document is Protected using Password</p> <p>4.4 Document is saved after finalization.</p>

5. Print & Transfer Document	5.1 Printer is selected and <b><u>settings</u></b> are confirmed 5.2 Appropriate size of paper is ensured as required 5.3 Print preview is checked 5.4 Document is Printed 5.5 Document is transferred using <b><u>Storage Media.</u></b>
<b>Range of Variables</b>	
<b>Variable</b>	<b>Range</b> (may include but not limited to):
1. Necessary Software's	1.1 Word Processing Application Software 1.1.1. Microsoft Word 1.1.2. LibreOffice Writer 1.1.3. WPS Office Free Writer 1.1.4. Google Doc 1.2 Bangla typing Software 1.2.1. Bijoy 1.2.2. Avro 1.3 Converter 1.3.1 Unicode to ASCII code (Bijoy) 1.3.2 ASCII code (Bijoy) to Unicode
2. Type of documents	2.1 Application 2.2 CV 2.3 Cover letter 2.4 Report 2.5 Project Proposal 2.6 Mail merge 2.6.1. Letter 2.6.2. Email 2.6.3. Envelopes 2.6.4. Label
3. Page layout	3.1. Page Orientations 3.2. Page Size 3.3. Margin 3.3.1 Top 3.3.2 Bottom 3.3.3 Left 3.3.4 Right 3.4. Header and Footer 3.5. Page Number 3.6. Columns

4. Contents	4.1 Text 4.1.1 Drop Cap 4.1.2 Signature Line 4.2 Table 4.2.1. Row 4.2.2. Column 4.2.3. Fit option 4.2.4. Merge & Split 4.2.5. Alignment 4.2.6. Repeat Header Row 4.3 Illustrations 4.3.1 Picture 4.3.2 Shapes 4.3.3 Text Box 4.3.4 SmartArt 4.3.5 Chart 4.3.6 Screenshot 4.4 Symbols 4.5 Equation 4.6 Links 4.6.1 Hyperlink 4.6.2 Bookmark 4.7 Table of Contents
5. Breaks Options	5.1 Page Break 5.2 Column Break 5.3 Section Break
6. Formatting	6.1 Font 6.2 Paragraph 6.3 Image size 6.4 Alignment
7. References	7.1 Footnote 7.2 Endnote 7.3 Bibliography 7.4 Index
8. File Format	8.1. .doc 8.2. .docx 8.3. .pdf 8.4. .rtf 8.5. .txt 8.6. .dot 8.7. .dotx 8.8. .dotm

9. Settings	<ul style="list-style-type: none"> <li>9.1 Printing Page</li> <li>9.2 Single/Both side Print.</li> <li>9.3 Odd/Even Page print</li> <li>9.4 Collated</li> <li>9.5 Page Orientation</li> <li>9.6 Paper Size</li> <li>9.7 Margins</li> <li>9.8 Page Per sheet</li> </ul>
10. Storage Media	<ul style="list-style-type: none"> <li>10.1 USB Pen drive</li> <li>10.2 Portable Hard drive</li> <li>10.3 Optical Disk</li> </ul>
<p><b>Evidence Guide</b> The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.</p>	
1. Critical aspects of competency	<p>Assessment required evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 created document</li> <li>1.2 formatted document</li> <li>1.3 reviewed and protected document</li> <li>1.4 printed and transferred document</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Occupational Health &amp; Safety.</li> <li>2.2 Hazard in IT workplace.</li> <li>2.3 Use of appropriate PPEs.</li> <li>2.4 Desktop items</li> <li>2.5 Software and application packages</li> <li>2.6 keyboard layout.</li> <li>2.7 Use of word processing application software.</li> <li>2.8 Margin and page layout.</li> <li>2.9 Understand the different types of documents.</li> <li>2.10 Spelling and grammar</li> <li>2.11 File format/extension.</li> <li>2.12 Save and Save As</li> <li>2.13 Printing process</li> <li>2.14 Shut down procedure</li> <li>2.15 Procedure to Keep a clean workplace and equipment orderly.</li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Operating a personal computer</li> <li>3.2 Typing in English and Bangla</li> <li>3.3 Operate Printer</li> </ul>

4. Required attitudes	4.1 Commitment to occupational safety and health. 4.2 Promptness in carrying out activities. 4.3 Sincere and honest to duties. 4.4 Eagerness to learn the document preparation process. 4.5 Tidiness and timeliness. 4.6 Environmental concerns. 4.7 Respect for the rights of peers, subordinates and seniors at the workplace. 4.8 Communication with peers, subordinates and seniors in the workplace. 4.9 Keeps a clean and orderly workplace and equipment.
5. Resource implication	The following resources must be provided: 5.1 Workplace (actual or simulated). 5.2 Tools, equipment and physical facilities appropriate to perform activities. 5.3 Materials consumable to perform activities.
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning
7. Context of assessment	7.1 Competency assessment must be done in NSDA accredited center. 7.2 Assessment should be done by NSDA certified/nominated assessor
<p><b>Accreditation Requirements</b></p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under NSQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	



<b>Unit Code and Title</b>	<b>OU-ICT-CO-03-L3-V1: Prepare a spreadsheet</b>
<b>Unit Descriptor</b>	This unit covers the knowledge, skills and attitudes required to prepare a spreadsheet. This specifically includes the task of preparing for the Job, creating spreadsheet, applying formulas and functions, performing data manipulation and presentation, reviewing and protecting workbook, and printing and transferring document.
<b>Nominal Hours</b>	<b>90 Hours</b>
<b>Elements of Competency</b>	<b>Performance Criteria</b> <b><u>Bold &amp; Underlined</u></b> terms are elaborated in the Range of Variables
1. Prepare for the Job	1.1 Safe work practices according to workplace procedures are observed and followed. 1.2 <b><u>Necessary Software</u></b> is checked and ensured operational as per job requirement. 1.3 <b><u>Types of documents</u></b> are identified to be prepared.
2. Create Spreadsheet	2.1 Workbook is created from blank/ library as per requirement. 2.2 <b><u>Components of spreadsheet interface</u></b> are identified 2.3 <b><u>Cell formatting</u></b> is performed as per <b><u>data type</u></b> 2.4 <b><u>Page layout</u></b> are set as per job requirements. 2.5 Data <b><u>Contents</u></b> is inserted as per specification. 2.6 <b><u>Paste Special</u></b> options are used if required. 2.7 Freeze pane is used if required 2.8 Spell check (for English) is performed. 2.9 Workbook is saved in a specific directory/ destination as instructed with appropriate <b><u>File format</u></b> .
3. Apply formulas and functions	3.1. Formulas are applied using <b><u>operators</u></b> 3.2. <b><u>Functions</u></b> are applied as per requirement 3.3. <b><u>Data validation</u></b> is performed as per requirement
4. Perform data manipulation and presentation	4.1 Data is sorted with different criteria. 4.2 Data is filtered with different conditions. 4.3 Conditional Formatting is applied 4.4 <b><u>Data manipulation tools</u></b> are applied 4.5 Data is presented using <b><u>Charts</u></b> as required
5. Review and Protect Workbook	5.1 Workbook is reviewed against job specification in track change mode. 5.2 Comments are inserted as required 5.3 Workbook is saved after finalization. 5.4 Workbook is Protected using Password

6. Print and Transfer Document	6.1 Page layout is set using <b>print titles</b> options 6.2 Printer is selected and <b>printer settings</b> are confirmed 6.3 Appropriate size of paper is ensured as required 6.4 Print preview is checked. 6.5 Workbook is Printed 6.6 Document is transferred using <b>Storage Media.</b> 6.7 <b>Page layout Elements</b> are set as per instructions.
<b>Range of Variables</b>	
<b>Variable</b>	<b>Range</b> (may include but not limited to):
1. Necessary Software	1.1 Spreadsheet Application Software 1.2 Excel 1.3 LibreOffice Calc 1.4 OpenOfficeOrg 1.5 Google sheet 1.6 Numbers (MacOS)
2. Type of documents	2.1 Calendar 2.2 Monthly budget 2.3 Salary sheet 2.4 Work schedule 2.5 Loan calculator 2.6 Organizational chart 2.7 Invoice 2.8 Inventory list 2.9 Result sheet 2.10 Data summery report
3. Components of spreadsheet	3.1. Title bar 3.2. TAB 3.3. Ribbon 3.4. Formula Bar 3.5. Workbook views 3.6. Zoom Option
4. Cell formatting	4.1 Alignment 4.2 Font 4.3 Border 4.4 Fill 4.5 Protection
5. Data type	5.1. Text 5.2. Number 5.3. Currency 5.4. Accounting 5.5. Date 5.6. Time 5.7. Percentage 5.8. Text

	<p>5.9. Special</p> <p>5.10. Custom</p>
6. Contents	<p>6.1 Text</p> <p>6.1.1 Wrap text</p> <p>6.1.2 Merge</p> <p>6.2 Table</p> <p>6.2.1. Row</p> <p>6.2.2. Column</p> <p>6.2.3. Merge &amp; Split</p> <p>6.2.4. Alignment</p> <p>6.3 Illustrations</p> <p>6.4 Symbols</p> <p>6.5 Links</p> <p>6.5.1 Hyperlink</p> <p>6.5.2 Cell</p> <p>6.5.3 Sheet</p>
7. Paste Special	<p>7.1 Formulas</p> <p>7.2 Values</p> <p>7.3 Formats</p> <p>7.4 Transpose</p> <p>7.5 Paste Link</p>
8. File format	<p>8.1 .xls</p> <p>8.2 .xlsx</p> <p>8.3 .csv</p> <p>8.4 .xml</p>
9. Operator	<p>9.1 Arithmetic</p> <p>9.1.1. + (Addition)</p> <p>9.1.2. - (Subtraction)</p> <p>9.1.3. * (Multiplication)</p> <p>9.1.4. / (Division)</p> <p>9.2 Logical</p> <p>9.2.1. AND</p> <p>9.2.2. OR</p> <p>9.2.3. NOT</p> <p>9.3 Relation</p> <p>9.3.1. = (Equal)</p> <p>9.3.2. &lt; (Less Than)</p> <p>9.3.3. &gt; (Greater Than)</p> <p>9.3.4. &lt;= (Less Than Equal)</p> <p>9.3.5. &gt;= (Greater Than Equal)</p> <p>9.3.6. &lt;&gt; (Not Equal)</p>

10. Function	10.1. SUM 10.2. SUMIF 10.3. SUMIFS 10.4. MAX 10.5. MIN 10.6. AVERAGE 10.7. AVERAGEA 10.8. RANK 10.9. IF (Nested If) 10.10. Count 10.11. CountA 10.12. CountIF 10.13. VLookup 10.14. Concatenate
11. Data Validation	11.1. List 11.2. Text Length 11.3. Date 11.4. Time 11.5. Custom 11.6. Number
12. Data manipulation Tools	12.1. Text to Column 12.2. Remove Duplicate 12.3. Consolidate 12.4. Group / Ungroup 12.5. Table 12.6. Pivot Table 12.7. Hyperlink
13. Chart	13.1. Column 13.2. Line 13.3. Pie 13.4. Bar
14. Print titles	14.1. Set Print Area 14.2. Rows to repeat at Top 14.3. Columns to repeat to Left 14.4. Page Order
15. Printer settings	15.1. Printing Page 15.2. Single/Both side Print. 15.3. Odd/Even Page print 15.4. Collated 15.5. Page Orientation 15.6. Paper Size 15.7. Margins 15.8. Page Per sheet

16. Storage Media	16.1. USB Pen drive 16.2. Portable Hard drive 16.3. Optical Disk
17. Page layout Elements	17.1. Page Orientations 17.2. Page Size 17.3. Margin 17.3.1. Top 17.3.2. Bottom 17.3.3. Left 17.3.4. Right 17.4. Header and Footer 17.5. Page Number 17.6. Columns
<b>Evidence Guide</b> The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 applied formulas and functions 1.2 performed data manipulation and presentation 1.3 reviewed and protected workbook
2. Underpinning knowledge	2.1 Use of spreadsheet application software. 2.2 Different type of Excel documents. 2.3 File format/extension. 2.4 Type of charts, importance of chart 2.5 Different type of math and logical functions. 2.6 Different type of operator
3. Underpinning skills	3.1 Performing demonstration of 3.2 Using logical functions 3.3 Creating table 3.4 Using Operators
4. Required attitudes	4.1 Commitment to occupational safety and health. 4.2 Promptness in carrying out activities. 4.3 Sincere and honest to duties. 4.4 Eagerness to learn the document preparation process. 4.5 Tidiness and timeliness. 4.6 Environmental concerns. 4.7 Respect for the rights of peers, subordinates and seniors at the workplace. 4.8 Communication with peers, subordinates and seniors in the workplace.

	4.9 Keeps a clean and orderly workplace and equipment.
5. Resource implication	The following resources must be provided: 5.1 Workplace (actual or simulated). 5.2 Tools, equipment and physical facilities appropriate to perform activities. 5.3 Materials consumable to perform activities.
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning
7. Context of assessment	7.1 Competency assessment must be done in NSDA accredited center. 7.2 Assessment should be done by NSDA certified/ nominated assessor
<p><b>Accreditation Requirements</b></p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under NSQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	

<b>Unit Code and Title</b>	<b>OU-ICT-CO-04-L3-V1: Prepare a Presentation</b>
<b>Unit Descriptor</b>	This unit covers the knowledge, skills and attitudes required to prepare a presentation. This specifically includes preparing for the job, creating and furnishing presentation, applying slide master, and printing and transferring presentation.
<b>Nominal Hours</b>	<b>60 Hours</b>
<b>Elements of Competency</b>	<b>Performance Criteria</b> <b><u>Bold &amp; Underlined</u></b> terms are elaborated in the Range of Variables
1. Prepare for the Job	<p>1.1 Safe work practices according to workplace procedures are observed and followed.</p> <p>1.2 <b><u>Necessary software</u></b> is checked and ensured operational as per job requirement.</p> <p>1.3 <b><u>Types of presentation</u></b> are identified to be prepared.</p>
2. Create Presentation	<p>2.1 New presentation file is created from blank/ library as per requirement.</p> <p>2.2 <b><u>Components of presentation interface</u></b> are identified</p> <p>2.3 Slide size is selected as per requirement.</p> <p>2.4 Slides are inserted with appropriate layout as required.</p> <p>2.5 <b><u>Contents</u></b> are inserted as per presentation requirement.</p> <p>2.6 Presentation is saved in a specific directory/ destination as instructed with appropriate <b><u>file format</u></b>.</p> <p>2.7 Slides are checked with the <b><u>presentation views</u></b>.</p>
3. Furnish presentation	<p>3.1 Slides background customization are performed</p> <p>3.2 <b><u>Animations</u></b> are applied</p> <p>3.3 <b><u>Transitions</u></b> are applied</p> <p>3.4 Presentation is checked</p>
4. Apply slide master	<p>4.1 Slide layout is selected from Slide Master</p> <p>4.2 Slide layout is customized as per requirements.</p> <p>4.3 <b><u>Slide master options</u></b> are applied as required</p> <p>4.4 Master view is closed</p>
5. Print and Transfer presentation	<p>5.1 Printer is selected and <b><u>settings</u></b> are confirmed</p> <p>5.2 Presentation slides are Printed</p> <p>5.3 Presentation is transferred using <b><u>storage media</u></b>.</p> <p>5.4 Appropriate print format is selected for presentation.</p> <p>5.5 Presentation is exported with <b><u>expected format</u></b></p>
<b>Range of Variables</b>	
<b>Variable</b>	<b>Range</b> (may include but not limited to):

1. Necessary Software's	1.1 Presentation Application Software 1.1.1 Microsoft PowerPoint 1.1.2 LibreOffice impress 1.1.3 Prezi 1.1.4 Google Slide 1.2 Bangla typing Software 1.2.1 Bijoy 1.2.2 Avro
2. Types of presentation	2.1 Business Presentation 2.2 Personal Portfolio 2.3 Infographic Resume 2.4 Education Materials
3. Components of presentation interface	3.1 Tab 3.2 Ribbon 3.3 Bar
4. Contents	4.1 Text 4.2 Table 4.3 Illustrations 4.3.1 Picture 4.3.2 Shapes 4.3.3 Customize Shape 4.3.4 Text Box 4.3.5 SmartArt 4.3.6 Chart 4.3.7 Screenshot 4.3.8 Icon 4.3.9 3D Model 4.4 Symbols 4.5 Equation 4.6 Hyperlink 4.7 Media 4.7.1 Audio 4.7.2 Video 4.7.3 Screen Recording 4.8 Infographic 4.9 Object 4.10 Countdown Timer 4.11 Action Button



5. File format.	<ul style="list-style-type: none"> <li>5.1 .pptx</li> <li>5.2 .pptm</li> <li>5.3 .ppt</li> <li>5.4 .pdf</li> <li>5.5 .xps</li> <li>5.6 .mp4</li> <li>5.7 .wmv</li> <li>5.8 .jpg</li> <li>5.9 .gif</li> <li>5.10 .png</li> <li>5.11 .tiff</li> </ul>
6. Presentation views.	<ul style="list-style-type: none"> <li>6.1. From beginning</li> <li>6.2. From Current slide</li> <li>6.3. Custom Slide show</li> <li>6.4. Slide sorter</li> </ul>
7. Animations	<ul style="list-style-type: none"> <li>7.1 Entrance</li> <li>7.2 Emphasis</li> <li>7.3 Exit</li> <li>7.4 Motion Paths</li> <li>7.5 More Effect</li> <li>7.6 Timing</li> <li>7.7 Animation Pane</li> </ul>
8. Transition	<ul style="list-style-type: none"> <li>8.1 Subtle</li> <li>8.2 Exciting</li> <li>8.3 Dynamic Content</li> </ul>
9. Slide master options	<ul style="list-style-type: none"> <li>9.1. Master layout</li> <li>9.2. Title</li> <li>9.3. Placeholder</li> <li>9.4. Background style</li> <li>9.5. Slide Size</li> </ul>
10. Settings	<ul style="list-style-type: none"> <li>10.1 Collated</li> <li>10.2 Print layout</li> <li>10.3 Handouts</li> <li>10.4 Page Orientation</li> <li>10.5 Paper Size</li> <li>10.6 Margins</li> <li>10.7 Page Per sheet</li> <li>10.8 Color</li> <li>10.9 Header &amp; footer</li> </ul>
11. Storage Media	<ul style="list-style-type: none"> <li>11.1 USB Pen drive</li> <li>11.2 Portable Hard drive</li> <li>11.3 Optical Disk</li> </ul>

12. Expected format	12.1 Pdf 12.2 Video 12.3 Handouts 12.4 Package for CD
<b>Evidence Guide</b> The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of the current version of the Unit of Competency.	
1. Critical aspects of competency	Assessment required evidence that the candidate: <ul style="list-style-type: none"> <li>1.1 created presentation</li> <li>1.2 furnished presentation</li> <li>1.3 applied slide master</li> <li>1.4 printed and transferred presentation</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Different types of presentation.</li> <li>2.2 File format/extension.</li> <li>2.3 Save and Save As</li> <li>2.4 Slide printing process</li> <li>2.5 Use of Slide transition, animation and motion path</li> <li>2.6 Procedure to Keep a clean workplace and equipment orderly.</li> </ul>
3. Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Creating presentation</li> <li>3.2 Designing slides</li> <li>3.3 Applying slide transition and animation</li> <li>3.4 Presenting slides</li> </ul>
4. Required attitudes	<ul style="list-style-type: none"> <li>4.1 Commitment to occupational safety and health.</li> <li>4.2 Promptness in carrying out activities.</li> <li>4.3 Sincere and honest to duties.</li> <li>4.4 Eagerness to learn the document preparation process.</li> <li>4.5 Tidiness and timeliness.</li> <li>4.6 Environmental concerns.</li> <li>4.7 Respect for the rights of peers, subordinates and seniors at the workplace.</li> <li>4.8 Communication with peers, subordinates and seniors in the workplace.</li> <li>4.9 Keeps a clean and orderly workplace and equipment.</li> </ul>
5. Resource implication	The following resources must be provided: <ul style="list-style-type: none"> <li>5.1 Workplace (actual or simulated).</li> <li>5.2 Tools, equipment and physical facilities appropriate to perform activities.</li> <li>5.3 Materials consumable to perform activities.</li> </ul>
6. Methods of assessment	Methods of assessment may include but not limited to: <ul style="list-style-type: none"> <li>6.1 Written test</li> <li>6.2 Demonstration</li> <li>6.3 Oral questioning</li> </ul>

7. Context of assessment	<p>7.1 Competency assessment must be done in NSDA accredited center.</p> <p>7.2 Assessment should be done by NSDA certified/ nominated assessor</p>
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**Accreditation Requirements**

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under NSQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

<b>Unit Code and Title</b>	<b>OU-ICT-CO-05-L3-V1: Use Internet and Access Resources</b>
<b>Unit Descriptor</b>	This unit covers the knowledge, skills and attitudes required to use internet and access resources. It specifically includes the task of preparing resources for sharing, accessing resource using internet, using and managing e-mail and using virtual platform.
<b>Nominal Hours</b>	<b>30 Hours</b>
<b>Elements of Competency</b>	<b>Performance Criteria</b> <b><u>Bold &amp; Underlined</u></b> terms are elaborated in the Range of Variables
1.Prepare resources for sharing	1.1 <b><u>Documents</u></b> is Scanned with required <b><u>file format</u></b> 1.2 File is converted using <b><u>file conversion tools</u></b> 1.3 File <b><u>compression tools</u></b> are used for compression and extraction. 1.4 Multiple PDF document is joined (if required)
2.Access Resource using internet	2.1. Internet <b><u>browser</u></b> is selected and installed. 2.2. <b><u>Browser setting</u></b> is carried out for smooth operation. 2.3. Resources are accessed using <b><u>Search engines.</u></b> 2.4. Resources are preserved in local storage.
3.Use and manage e-mail	3.1 E-mail account is created with a selected <b><u>email service provider.</u></b> 3.2 <b><u>E-mail operations</u></b> are performed as required 3.3 E-mail message is printed.
4.Use Virtual Platform	4.1 <b><u>Virtual Platform</u></b> is selected and logged in with user credentials. 4.2 Virtual meeting is performed using <b><u>platform facilities.</u></b> 4.3 Resources are shared through <b><u>cloud storage.</u></b> 4.4 Data is collected using <b><u>online form</u></b>
<b>Range of Variables</b>	
<b>Variable</b>	<b>Range (may include but not limited to):</b>
1. Documents	1.1 Single Page documents 1.2 Multiple page document 1.3 Picture 1.4 Signature
2. File format	2.1. .jpeg 2.2. .png 2.3. .pdf 2.4. .bmp 2.5. .tiff

<p>3. File conversion tools</p>	<p>3.1 Offline Tools (Default application)</p> <p>3.1.1. .doc/ .docx to .pdf,</p> <p>3.1.2. .xls/ .xlsx to .pdf,</p> <p>3.1.3. .ppt/ .pptx to .pdf,</p> <p>3.1.4. .jpg to .pdf</p> <p>3.2 Offline Tools (PDF to Others)</p> <p>3.2.1. PDF converter</p> <p>3.2.2. PDF Editor</p> <p>3.2.3. Foxit PDF Editor</p> <p>3.2.4. Adobe PDF Editor</p> <p>3.3 Online Tools</p> <p>3.3.1. <a href="http://www.ilovepdf.com">www.ilovepdf.com</a></p> <p>3.3.2. <a href="http://www.pdf2go.com">www.pdf2go.com</a></p> <p>3.3.3. <a href="https://pdf2doc.com/">https://pdf2doc.com/</a></p>
<p>4. Compression tools</p>	<p>4.1. WinZip</p> <p>4.2. WinRAR</p> <p>4.3. 7zip</p>
<p>5. Browsers</p>	<p>5.1. Microsoft Edge</p> <p>5.2. Google Chrome</p> <p>5.3. Mozilla Firefox</p> <p>5.4. Opera</p> <p>5.5. Safari</p> <p>5.6. Duroto browser</p> <p>5.7. Brave</p> <p>5.8. Yandex</p> <p>5.9. Netscape Navigator</p> <p>5.10. Tor Browser</p>
<p>6. Browser setting</p>	<p>6.1 Synchronization</p> <p>6.2 Privacy and security</p> <p>6.3 Autofill</p> <p>6.4 Appearance</p> <p>6.5 Language</p> <p>6.6 Download</p> <p>6.7 Accessibility</p> <p>6.8 Cookies</p> <p>6.9 History</p>
<p>7. Search engines</p>	<p>7.1 Google</p> <p>7.2 Yahoo</p> <p>7.3 Ask</p> <p>7.4 MSN</p> <p>7.5 Bing</p> <p>7.6 Pipilika</p> <p>7.7 Duckduckgo</p> <p>7.8 AltaVista</p>

8. E-mail services Provider	8.1. Free mail services 8.1.1. Gmail 8.1.2. Yahoo 8.1.3. Outlook 8.2. Web mail services
9. Email Operations	9.1. Compose 9.2. Send 9.2.1. Attachment 9.2.2. Single Recipient 9.2.3. Multiple Recipient 9.2.4. CC 9.2.5. BCC 9.3. Receive 9.4. Reply 9.5. Forward 9.6. Delete
10. Virtual Platform	10.1. Zoom 10.2. Bip 10.3. Meet 10.4. WhatsApps 10.5. WeChat 10.6. Remote Desktop Application 10.6.1. TeamViewer 10.6.2. AnyDesk 10.6.3. RemotePC
11. Platform facilities.	11.1. Meeting Schedule 11.2. Guest management 11.3. Session Recording 11.4. Screen Sharing 11.5. Messaging 11.6. File sharing
12. Cloud Storage.	12.1. Dropbox 12.2. MEGA 12.3. OneDrive 12.4. Google drive
13. Online form	13.1. Google form 13.2. Microsoft form 13.3. Type form 13.4. Paper form 13.5. Wufoo
<p><b>Evidence Guide</b> The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of the current version of the Unit of Competency.</p>	

1.Critical Aspects of Competency	<p>Assessment required evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 prepared resources for sharing</li> <li>1.2 accessed resource using internet</li> <li>1.3 used and managed e-mail</li> <li>1.4 used virtual platform</li> </ul>
2.Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Trends of using the internet.</li> <li>2.2 Common internet terms and its utilization.</li> <li>2.3 Know-how on the internet, www.</li> <li>2.4 Utilization process of website</li> <li>2.5 Relevant web address.</li> <li>2.6 Know-how on URL.</li> <li>2.7 Types of web browsers and its use.</li> <li>2.8 History cleaning process.</li> <li>2.9 Usages of Email.</li> <li>2.10 Email account creation process.</li> <li>2.11 Features of email and their usages.</li> <li>2.12 Usages of: <ul style="list-style-type: none"> <li>2.12.1. incognito mode</li> <li>2.12.2. synchronization</li> <li>2.12.3. autofill</li> <li>2.12.4. default browser</li> <li>2.12.5. reset and clean-up</li> <li>2.12.6. addons</li> </ul> </li> <li>2.13 Utilization process of search engines.</li> <li>2.14 Function of google services.</li> <li>2.15 Procedure of using this google services.</li> <li>2.16 Use of social media.</li> <li>2.17 Web based services process.</li> <li>2.18 Folder manipulation process.</li> <li>2.19 Netiquette</li> <li>2.20 Email Etiquettes</li> <li>2.21 Email Security</li> </ul>
3.Underpinning skills	<ul style="list-style-type: none"> <li>3.1 Accessing and sharing resources from the internet.</li> <li>3.2 Downloading / uploading file, documents and video from / to websites.</li> <li>3.3 Sending and receiving mail through e-mail service.</li> </ul>
4.Required attitudes	<ul style="list-style-type: none"> <li>4.1 Commitment to occupational safety and health.</li> <li>4.2 Promptness in carrying out activities.</li> <li>4.3 Sincere and honest to duties.</li> <li>4.4 Eagerness to learn the document preparation process.</li> <li>4.5 Tidiness and timeliness.</li> <li>4.6 Environmental concerns.</li> <li>4.7 Respect for the rights of peers, subordinates and seniors at the workplace.</li> <li>4.8 Communication with peers, subordinates and seniors in the workplace.</li> <li>4.9 Keeps a clean and orderly workplace and equipment</li> </ul>

5.Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated); 5.2 Relevant tools, equipment, software and facilities needed to perform the activities; and 5.3 Required learning materials.
6.Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test; 6.2 Demonstration; 6.3 Oral questioning;
7.Context of assessment	7.1 Competency assessment must be done in NSDA accredited center. 7.2 Assessment should be done by NSDA certified/ nominated assessor
<p><b>Accreditation Requirements</b></p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under NSQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	



<b>Unit Code and Title</b>	<b>OU-ICT-CO-06-L3-V1: Perform Basic Maintenance and Troubleshooting</b>
<b>Unit Descriptor</b>	This unit covers the knowledge, skills and attitudes required to perform basic maintenance and troubleshooting. It specifically includes identifying the problem, diagnosing and fixing peripheral device faults, fixing printing error, fixing application error and troubleshooting network connectivity.
<b>Nominal Hours</b>	<b>25 Hours</b>
Elements of Competency	Performance Criteria <b><u>Bold &amp; Underlined</u></b> terms are elaborated in the Range of Variables
1. Identify the problem	1.1 Occupational Safety and Health (OSH) procedures are followed. 1.2 Hardware & Software are checked for non-functionalities 1.3 <b><u>Problems</u></b> are Identified, recorded and reported to authority.
2. Diagnose and fix Peripheral device faults	2.1 Faulty Peripheral devices or connections are checked and identified. 2.2 The problems are diagnosed, recorded and reported to authority. 2.3 Faults are fixed within scope of jobs.
3. Fix printing error	3.1 <b><u>Printing error</u></b> is detected 3.2 Possible solutions for error selected and applied
4. Fix application error	4.1 Faulty Software or fonts are identified. 4.2 Application <b><u>Software and fonts</u></b> are installed/ Uninstalled 4.3 Updates for software's are checked and updated 4.4 <b><u>Device drivers</u></b> are checked and installed/ Uninstalled as required.
5. Troubleshoot network connectivity	5.1 <b><u>Network devices</u></b> are checked for connectivity. 5.2 Network connection are diagnosed 5.3 Network devices are Connected and disconnected for fixing network connection. 5.4 Unsolved issues are reported to the designated persons.
<b>Range of Variables</b>	
Variable	Range (may include but not limited to):
1. Problems	Hardware 1.1 Device Power Issue 1.2 Data cable issue 1.3 Device Date & Time mismatch 1.4 Boot Device fault Software:

	<ul style="list-style-type: none"> <li>1.5 OS Failure</li> <li>1.6 Application software error</li> <li>Network:</li> <li>1.7 Network connection</li> </ul>
2. Printing error	<ul style="list-style-type: none"> <li>2.1 Print spooling</li> <li>2.2 Paper jam</li> <li>2.3 Poor print quality</li> <li>2.4 Printer status Offline</li> </ul>
3. Software and fonts	<ul style="list-style-type: none"> <li>3.1 Office Application Software</li> <li>3.2 Bangla Typing Software <ul style="list-style-type: none"> <li>3.2.1. Bijoy</li> <li>3.2.2. Avro</li> </ul> </li> <li>3.3 Fonts</li> <li>3.4 ASCII (sutonnymj, ananda)</li> <li>3.5 Unicode (nikosh, solaimanlipi, kalpurush, mukti, vrinda, Sonar Bangla)</li> <li>3.6 Antivirus Software (Sophos, Kaspersky, McAfee, Norton, Bitdefender, Avira, Eset)</li> </ul>
4. Device drivers	<ul style="list-style-type: none"> <li>4.1 Printer Driver</li> <li>4.2 Scanner Driver</li> <li>4.3 Webcam Driver</li> </ul>
5. Network devices	<ul style="list-style-type: none"> <li>5.1 Switch</li> <li>5.2 Router</li> <li>5.3 Ethernet Cable</li> <li>5.4 Ethernet Port</li> <li>5.5 RJ45 Connector</li> <li>5.6 Wireless Adapter</li> <li>5.7 Access Point</li> </ul>
<p><b>Evidence Guide</b>  The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of the current version of the Unit of Competency.</p>	
1. Critical Aspects of Competency	<p>Assessment required evidence that the candidate:</p> <ul style="list-style-type: none"> <li>1.1 identified the problem</li> <li>1.2 diagnosed and fixed peripheral device faults</li> <li>1.3 diagnosed and fixed software faults</li> <li>1.4 diagnosed and fixed network faults</li> </ul>
2. Underpinning knowledge	<ul style="list-style-type: none"> <li>2.1 Type of software and hardware faults</li> <li>2.2 Faults diagnosis procedure</li> <li>2.3 Types of printing error</li> <li>2.4 Fixing procedure of printing error</li> <li>2.5 Network connectivity error</li> </ul>










3. Underpinning skills	3.1 Identifying problems 3.2 Diagnosing peripherals devices 3.3 Fixing application error 3.4 Troubleshooting networking connectivity
4. Required attitudes	4.1 Commitment to occupational safety and health. 4.2 Promptness in carrying out activities. 4.3 Sincere and honest to duties. 4.4 Eagerness to learn the document preparation process. 4.5 Tidiness and timeliness. 4.6 Environmental concerns. 4.7 Respect for the rights of peers, subordinates and seniors at the workplace. 4.8 Communication with peers, subordinates and seniors in the workplace. 4.9 Keeps a clean and orderly workplace and equipment
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated); 5.2 Relevant tools, equipment, software and facilities needed to perform the activities; and required learning materials.
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1. Written test; 6.2. Demonstration; 6.3. Oral questioning
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<p><b>Accreditation Requirements</b>  Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award qualification under NSQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	



## Development of Competency Standard

The Competency Standards for National Skills Certificate in Computer Operation, Level-3 is developed by NSDA on 4-7 April 2022.

### List of Members

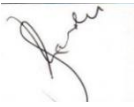



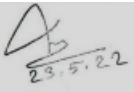

S/N	Name and Address	Position in the committee	Signature and Date
1.	Alif Rudaba, Member (Planning & Skills Standard) Joint Secretary, National Skills Development Authority (NSDA)	Chairperson	
2.	Md. Abdul Hye Siddiqui, Senior Instructor (Computer), BMET, Email: <a href="mailto:siddiqui.tc@gmail.com">siddiqui.tc@gmail.com</a> , Mobile: 01819725610.	Member	
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## Validation of Competency Standard

The Competency Standards for National Skills Certificate in Computer Operation, Level-3 is validated by NSDA on 23 May 2022.

### Members of the SCVC

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1.	Shafquat Haider, Chairman, ICT ISC, <a href="mailto:ciproco@bol-online.com">ciproco@bol-online.com</a> , shafquat.haider@gmail.com, Mobile No. 01711532597	Chairperson	
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